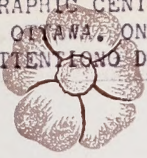
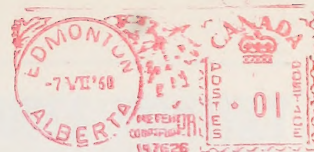


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Alberta INDUSTRIAL NEWSLETTER

- PLAYGROUND EQUIPMENT
- TV TUBES
- MAKING SPROCKETS
- AID TO INDUSTRIES

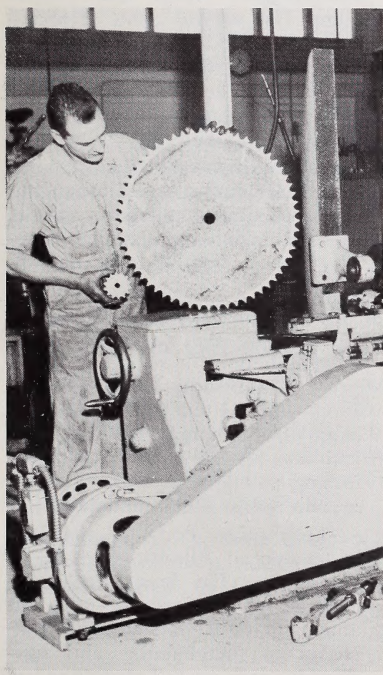
DEPARTMENT OF INDUSTRY AND DEVELOPMENT
INDUSTRIAL DEVELOPMENT BRANCH

Hon. A. R. PATRICK, Minister
R. MARTLAND, Director

VOL. 4, No. 3

EDMONTON, ALBERTA, CANADA

JUNE, 1960



Worker shows contrast between large and small sprockets made in plant.

FIRST PRAIRIE SPROCKET PLANT IN PRODUCTION AT LETHBRIDGE

Approximately 10,000 roller chain sprockets in a variety of sizes can be produced annually by Lethbridge Industries Ltd., the first sprocket manufacturers in the Prairie Provinces.

The firm employs a full time staff of 17 skilled employees and its services, in addition to the manufacturing of roller chain sprockets, include the rebuilding of large industrial motors, crankshaft regrounding and machine work of all types. Special equipment and facilities are available for the overhauling and repairing of large machinery such as gravel crushers, back hoes, draglines and bulldozers.

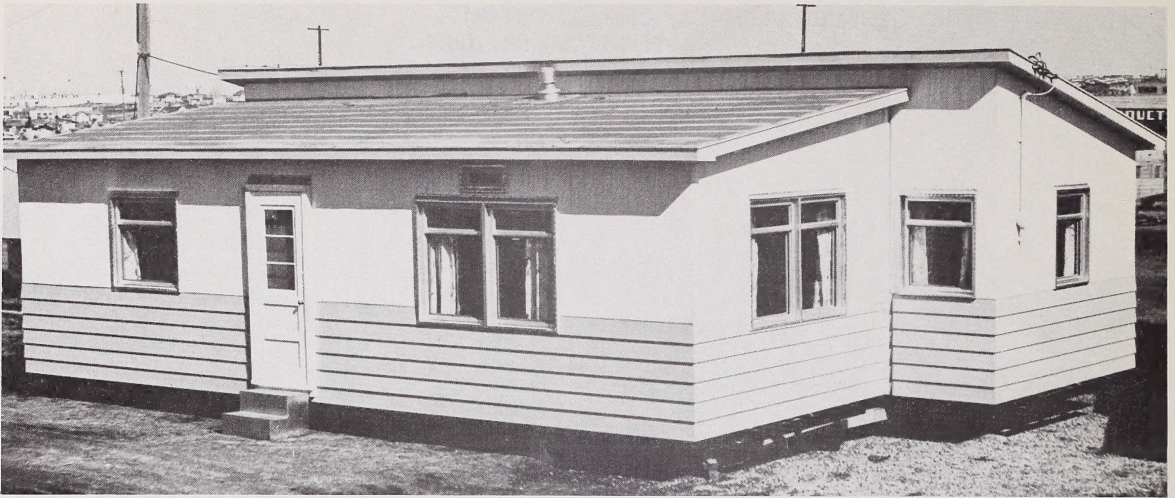
Lethbridge Industries Ltd., was formed in 1946 as a machine shop. In 1958 the proprietors decided to expand their operation to manufacturing and started construction on new premises with an area of 9,000 square feet.

Automatic equipment for the manufacture of roller chain sprockets was installed early in 1959. Two machines are able to cut 12 sprockets at one time in sizes ranging from one-half inch to two-inch pitch and up to five-feet in diameter. One order was filled for a sprocket weighing over 200 pounds. The firm will use 40 tons of steel annually.

Other equipment found in the \$100,000 enterprise includes a turret lathe, 6 other types of lathes, 12-foot planer, a crankshaft grinder, plain grinder, milling machines, shapers, arc and acetylene welders and motor rebuilding equipment.

Gross sales of sprockets during the first year of manufacture totalled \$80,000. The company expects sales volume to triple in 1960.

The annual payroll of Lethbridge Industries Ltd. is in excess of \$63,000. The plant address is 1117-2nd Ave. "A" North, Lethbridge.



One of the new pre-built homes now produced for easy erection and economical installation.

PRE-BUILT HOMES AND MOTELS NOW MANUFACTURED IN ALBERTA

An expansion program highlighted by the opening of a new 25,000 square foot manufacturing plant was recently completed by Lethbridge Body Works Ltd. The southern Alberta firm fabricates unique, furnished portable homes, pre-built motels, and a complete line of industrial camp units and mobile homes under the "Merriman" trade name.

The company was formed in 1944 for the purpose of manufacturing grain boxes, freight vans, school vans and other type truck bodies. By 1955 efforts were concentrated on producing mobile homes, industrial camp units, and portable homes. Pre-built motels were introduced last year.

"Merriman" portable homes, believed to be the first of their type in North America, are designed to solve any short or long-term housing problem. The original portable home was built to serve as a movable teacherage for a southern Alberta school district.

The home is built in two twelve-foot wide sections; one 32 feet in length, the second 36 feet long. A spacious living room and

one bedroom is found in the shorter section while the other features two bedrooms, kitchen and bath.

The units are soundly constructed and have two-inch fibre glass insulation plus a vapor barrier. Heat is provided by a forced air, oil-fired furnace. Plumbing, gas and electrical installations are provided.

All bedrooms feature built-in wardrobes and vanity. The kitchen has ample counter and cupboard space and a double sink. There is a furnace in each section.

The portable homes can be purchased completely furnished. Sections are transported to sites on special lowboy trailers, and can be assembled and occupied within eight hours of delivery. They can be erected on bare ground or timber or cement footings.

The pre-built motels are also constructed in twelve-foot widths. Purchasers have a choice of six standard room plans including single and double sleeping and/or housekeeping units.

The motel units are delivered complete with electrical wiring, all

plumbing fixtures, sewer and water connections and individual unit thermostat controlled heating systems.

Lethbridge Body Works also manufactures travel and mobile homes in several sizes. Holiday trailers are made in 16-, 18- and 23-foot lengths while mobile homes are built in lengths from 27 feet to 55 feet and in 8-, 10- and 12-foot widths.

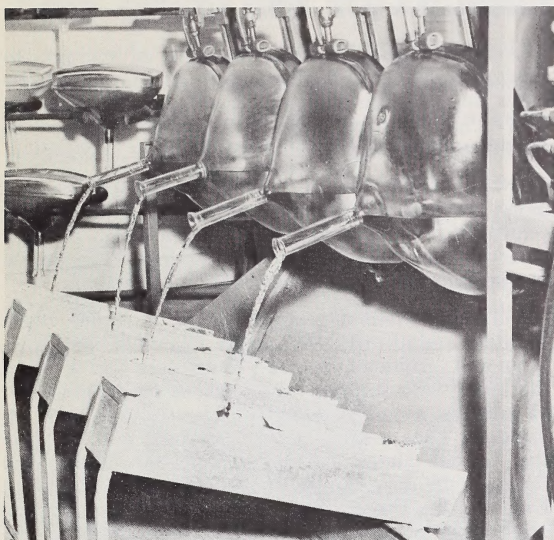
In addition, the firm builds industrial camp units such as kitchens, diners, sleepers, offices, recreation and commissary trailers. They may be skid or wheel-mounted.

Retail sales of products manufactured by the Lethbridge firm are handled by a subsidiary company, Lethbridge Mobile Homes Ltd., formed in 1956. Another subsidiary company, LMH Rentals Ltd. was formed in 1958 to handle leasing and rentals of all types of mobile house accommodation.

Lethbridge Body Works Ltd. is located at 619-4th Ave. N. in Lethbridge. The firm employs an average of 55 persons with an annual payroll of \$168,000. Purchases of merchandise and payment for services in Lethbridge last year was in excess of \$300,000.

The sales volume of the firm in 1959 was approximately \$1,180,000.

CALGARY FIRM PRODUCES 500 REBUILT TV TUBES MONTHLY



A rack of television tubes emptying into specially prepared troughs during their rebuilding.

Empty tubes are placed on the device and half-filled with a mixture of very pure water and chemicals. Phosphor powder is sprayed into the water and allowed to settle on the surface face of the tube, forming the familiar screen. The tilt table is then set into motion, gently tipping the tubes until all fluid is poured out, leaving the phosphor coating on the screen.

A small amount of aluminum is vaporized in the tube to provide greater brightness and contrast. In this process a vacuum device subjects the bulb to one-hundred millionth of normal atmospheric pressure. Vaporized aluminum condenses on the back of the screen providing greater illuminization.

Tubes are subjected to a temperature of 800 degrees F. in a six-tubing baking oven and a new electron gun is sealed in when the tube has cooled. The bulb is again subjected to a similar heating process in an exhaust oven which serves to drive out gases and create a vacuum. A socket is attached and the electron gun activated by drawing current through the tube.

All tubes are subjected to several tests before shipment to distributors in Alberta.

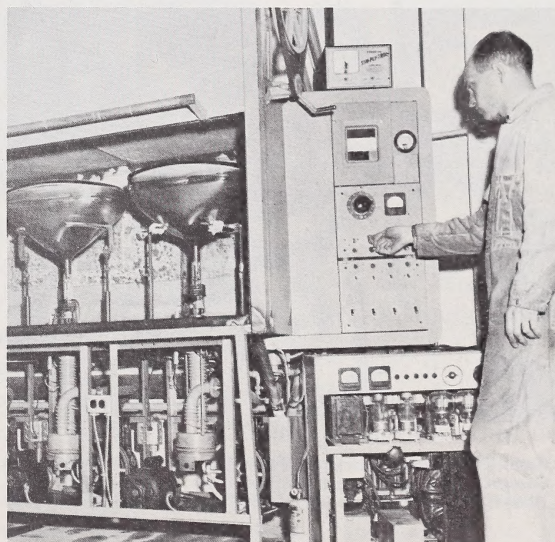
The only television picture tube factory between Western Ontario and Vancouver recently went into production at Calgary. The firm, known as Caltron Manufacturing Limited, is operated by two new Canadians who received their electronics training in Holland.

The new company expects to manufacture approximately 500 picture tubes each month, operating on a one-shift basis with four employees. Annual sales volume will reach \$90,000. Tube sizes ranging from 17-inch to 27-inch will be built. Equipment in the plant, which is located at 219-40 Ave. N.E., is valued at more than \$40,000.

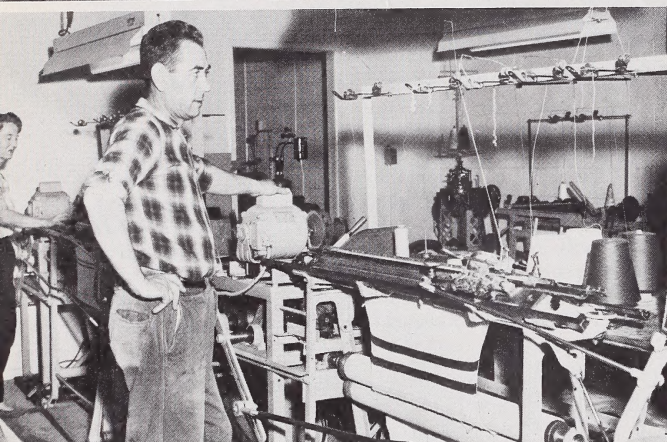
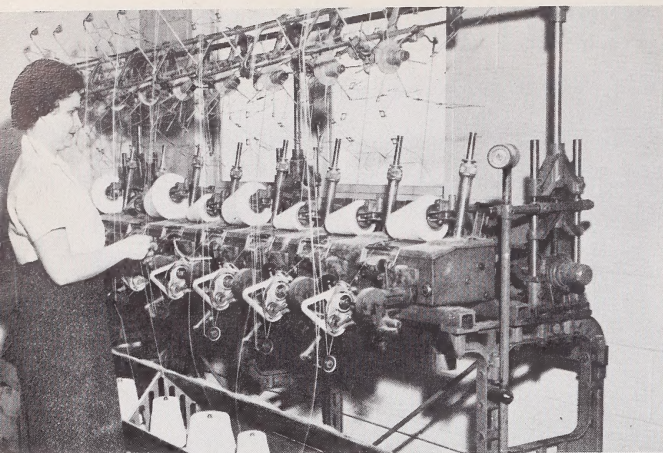
Defective picture tubes which have been returned to television manufacturers are purchased by the Calgary firm as their primary raw material.

On arrival at the plant the neck of the funnel-shaped tubes are cut open and the old electron gun removed. A new piece of tubing to replace the broken neck is welded onto the bulb under a heat process which subjects the glass to temperatures ranging from approximately 1800 degrees F.

When cool, the bulb is thoroughly cleaned and washed with acid. A device known as a "tilt table" is next utilized in the manufacturing procedure.



A bank of television tubes being subjected to pumping during process of restoration.



Top—This machine waxes and transfers yarn to knitting cones.
Center—Cylindrical sweater sections are continuously knitted.
Bottom—One of the many sweater styles made by the firm.

NEW PLANT HOUSES EDMONTON KNITTING MILL

One of Alberta's major suppliers of sweaters to thousands of school students and members of various clubs in Western Canada for the past 30 years, Cloverdale Knitting Mills Ltd. recently moved to a modern new plant at 14506-118 Avenue, Edmonton.

The wholly Alberta owned manufacturing company provides school and fraternal sweaters in any combination of 20 colors and in many styles and designs. These include zipper jacket style models, longer button type and bulky knit curling sweaters.

The new rented premises are in a cement block building and afford 2,400 square feet of office, showroom and production space. The knitting and winding machines were obtained from Sweden and are capable of knitting a complete sweater in approximately 20 minutes. The pressing machines were purchased in the United States. Several sewing machines, each designed to do a special job, were manufactured in England, the United States and Canada. Value of the equipment totals \$65,000.

The Australian and New Zealand wool used for the product are purchased from an eastern Canadian firm and shipped as skeins. The skeins are mechanically converted at the plant to milling cones. During the process they are very carefully checked for color consistency before being re-waxed. This process gives the company a much greater control of the quality than purchasing the wool already on cones.

A knitting machine knits a cylindrical "sweater", alternating colors as required. Sweater bulk is determined by wool and needle size. The sweater body can be opened by removing a drawstring. The sleeves are made in pairs on a similar machine. The parts of the sweater are pressed and blocked to proper size, and then sent to the assembly room for final finishing.

Sleeves are attached, pockets sewn in and further piping and collar strips applied. The finished product is again pressed and packaged in polythene.

The control of color is very strict. No two lots of wool are exactly the same color; consequently, they are numbered at the time they are dyed. Two different lots are not used in the same sweater.

Cloverdale Knitting Mills Ltd. employs a permanent staff of five which increases to nine during the autumn busy season. Annual payroll totals \$25,000. Annual gross of this pioneer company is approximately \$75,000.

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PLAYGROUND EQUIPMENT, JAILS, OTHER METAL WORK PRODUCED ON MASS BASIS IN MEDICINE HAT FACTORY



Top—One of the “Jungle Gyms” enjoyed by kiddies.

Below—These circular slides are always in use.



A Medicine Hat firm that has demonstrated its versatility by making “possum bellies”, is establishing a major place for itself in Canada in the construction of metal playground equipment. The S. F. Scott Manufacturing Company is one of the pioneer metal-working firms of western Canada. The new modern building in Medicine Hat’s new light industrial area on the Trans Canada Highway is in its second year of operation.

The firm’s history goes back to the arrival in Medicine Hat in 1917 of Simon Scott who opened a blacksmithing shop. The company was formally organized in 1950, and prospered until 1957 when fire destroyed the firm’s premises.

A new structure was built in its present site the same year and the 6,000 square foot red brick factory uses equipment that was largely designed and manufactured by the firm’s employees. In addition to the plant area, an attractive 1,000 square foot office complete with reception room, office and drafting room, serves the firm’s needs.

The “possum bellies” that the firm built—and which are racks hung under circus wagons to carry tent poles—are only one of the many unusual types of metal fabrication undertaken by the S. F. Scott Company. Other articles regularly produced include jail cells, hydraulic aerial ladders, electric

line power clamps, picnic tables, steel stairways, swimming pool equipment, and of course, much playground equipment.

Active management of the firm is carried on by Mr. Scott’s son Donald, who left school teaching to join the firm a few years ago. Designer of much of the production is son-in-law Fred Allen, who has been with the Scotts since 1938.

The payroll lists 21 staffers, who contribute almost \$60,000 in salaries to the city’s economy. Ability of the staff to cope with manufacturing problems quickly and effectively is demonstrated in the firm’s designing and manufacturing “tumble-bug” earth movers and even such projects as weed burners during its productive history.

Quick to recognize and meet a need, the company produces playground equipment not only for normal playground use, but also for retarded children. Reception for this specialty has been excellent.

The firm is turning out merchandise valued at more than \$170,000 a year and is unable to meet all demands. Expansion is again under consideration by the company.

Raw material is bought in Canada and distribution, handled directly, extends from Vancouver Island, B.C. to the province of Ontario.



The Research Council of Alberta building at Edmonton.

INFORMATION SERVICE AIDS ALL BUSINESSES THROUGHOUT ALBERTA

Assistance in finding solutions to technical problems hindering production in privately operated individual plants is just one of many services available to Alberta industry through the Technical Information Service of the Research Council of Alberta (T.I.S.).

The T.I.S. was established in 1945 under the federal Department of Reconstruction and Supply, and was later under the National Research Council. In 1953 the Research Council of Alberta took on the field operation of T.I.S.

Industrial engineers keep in close touch with industry and business by periodic calls throughout Alberta. About one-third of the enquiries resulting from such calls are passed on to the National Research

Council for detailed investigation. The remainder are treated by the Alberta staff. Assistance is often rendered by outside specialists in particular fields. All enquiries are treated as confidential.

The wide background and experience of the T.I.S. engineers, backed by an excellent library of technical papers and superb laboratory equipment, allow them to solve the problems in the many fields of industry. The engineers are able to provide assistance in methods of manufacture with special reference to raw material supply, waste utilization, equipment layout and method of construction of plants. Data is also made available on lighting, heating, ventilation, air pollution, safety, and many other technical subjects.

T.I.S. engineers are interested in participating in and reporting on industrial research, especially in the fields of industrial engineering, management, and personnel administration. Firms attempting such techniques as merit rating, selection of personnel by means of psychological tests, operations research, work study, etc., are invited to have an industrial engineer help plan their project.

In addition to field trips to all sections of Alberta, T.I.S. staff periodically conduct seminars for a group of industries, where problems common to the industry are discussed. The staff members are also available as speakers for any trade or industrial association meeting or convention.

Further information is available by writing: Technical Information Service, Research Council of Alberta, Edmonton; or by telephoning Edmonton, GE 3-6421 or Calgary AM 9-6675.

ALBERTA INDUSTRIAL OPPORTUNITIES

Magnesium anodes are becoming widely used throughout Western Canada to mitigate soil side corrosion of buried steel pipelines in cathodic protection work. The anodes used are not being manufactured in Alberta at present and the possibility exists that a local foundry could produce them.

The most popular size used consists of a 4" diameter by 20" cylindrical anode. It contains 16 pounds of high purity magnesium which is cast on a 5/16" crimped steel core. The metal must not contain over 0.0005% total copper, nickel and iron. Approximately \$80,000 worth of magnesium anodes were used in 1959. With the increasing number of miles of pipelines being laid each year and the aging of existing pipelines, a rapid increase in the use of magnesium anodes is anticipated.

Research organizations of the Department of Industry and Development will attempt to secure additional information on any of the topics mentioned in this section on behalf of interested parties. Inquiries should be directed to Richard Martland, Director, Industrial Development Branch, Department of Industry and Development, Edmonton.

TOWN OF HINTON

Location: Section 51-24-25-W5 in Census Division No. 14; 185 miles west of Edmonton on paved highway, and CNR main line.

Altitude: 3,265 feet.

Temperature: Mean summer, 53 degrees F.; mean winter, 23 degrees F.; mean yearly average, 36 degrees F.

Rainfall: Annual rainfall, 15.22 inches; annual snowfall, 14.69 inches, total annual precipitation, 20.27 inches.

Geology: This area is underlain by sedimentary rocks of Upper Cretaceous age, known as the Saunders group. These rocks consist of sandstones, shale, thin volcanic ash beds, conglomerate and coal. A surface cover of glacial drift is composed of sandy clay.

Soil: Hinton is in the grey wooded soil zone. Vegetation is a mixed deciduous and evergreen woodland in which moss bogs and sedge bogs are a common occurrence. The depth to lime is quite variable, often ranging from 30 to 50 inches. Soils are low in nitrogen and organic matter, and frequently deficient in sulphur and phosphorus. Mixed farming is practised, with legumes, hays and coarse grains the most desirable crops.

History: Hinton was formed in 1910, and for 45 years was a small centre. In 1955 the North Western Pulp and Power Company commenced construction of a \$60 million pulp mill. More than 240 acres of land was cleared for plant and residences.

Prior to the pulp mill, the forests and fur trapping drew the first white settlers to the area.

Living Conditions: Hinton stands on the slope and valley of the Athabasca River. All modern services are available including sewer, water, power and natural gas. Transportation is provided by rail, bus and truck. Excellent schools offer subjects in Grades One to Twelve and options. Seven churches serve the spiritual needs of the community. Modern facilities for winter and summer sports and recreation are provided. Hinton is in an exceptional big game hunting area.

Administration: The town is governed by a mayor elected for a two-year term, and six councillors,



two elected each year to a three-year term. A secretary-treasurer administers the town affairs according to policies set by council.

Law Enforcement: The town has its own police force including a chief, and two constables. There is also an RCMP detachment, police magistrate and justice of the peace.

Fire Protection: A volunteer fire brigade of 19 has at its disposal adequate equipment to provide efficient fire protection. A modern fire fighting unit is also owned by the North Western Pulp and Paper mill.

Tax Structure: The mill rate is 47 mills based on 10 municipal, 32 school and five hospital. Total assessment is \$11,402,925 with \$391,105 land, 100 percent of value, and \$11,011,820 improvements, 100 percent of fair value.

Areas: Total area of town, 3,520 acres. There are 9.18 miles of sanitary sewers and 8.66 miles of water mains.

Power: Three phase 60-cycle power is supplied to the town under a franchise by Calgary Power Ltd. Three rate systems are used—domestic, commercial and a special power rate. Structure available on request.

Water and Sewer: Water is purchased by the town from the pulp and paper mill who obtain it from the Athabasca River. The company controls a

pumping capacity of 32,000,000 gallons per day. Two ground storage reservoirs each have a capacity of 32,000,000 gallons.

Gas: Natural gas is supplied to the town under a franchise by Northwestern Utilities Ltd. General rate available to all customers—first 20 therms or less, \$3.00 per month; all additional therms, .08 cents per therm. An optional rate is available to customers whose annual consumption is more than 7,400 therms. Fixed charge is \$20.00 per month, plus a commodity charge of .05 cents per therm.

Fuel: L.P. gas with a heat value of 2,521 BTU per gallon at 60 degrees F. is available in bulk at 19 cents per gallon, or 100-pound cylinder at \$6.50. Diesel fuel is available at 19.2 cents per gallon. Coal is not used in the community but is available from nearby mines.

Local Resources: Horses, cattle, lumber, sand, gravel and gas.

Government Offices and Services: Federal: Post Office, RCMP. Provincial: Alberta Government Telephones, liquor store, forestry station and forestry school. Municipal: Town hall, fire hall, police department, town engineer, waterworks foreman, public works foreman.

Health Services: A new 25-bed hospital began operating in January, 1960. Staff of the Edson Health Unit provide medical services to school children. There are three doctors, one dentist, four drug stores, one chiropractor and a visiting optometrist.

Professional and Skilled Services: One accountant, one barrister, three barbers, three beauty parlors, one shoe repair and two watch repair shops.

Transportation: Main line of the CNR, Greyhound bus lines, taxi and local truck cartage.

Newspapers: Hinton Herald (weekly).

Communications: Telephone, telegraph, post office, all Edmonton radio stations.

Financial Facilities: Royal Bank of Canada, Bank of Nova Scotia (two branches).

Hotels: Athabasca Valley, Timberland, Hinton.

Tourist Camps: Wollin's Rocking Star, Pines Motel, West Hinton Ranch Motel, Vegreville Trailer Court, Cabin Court, West Haven Trailer Court, Park Lane Trailer Court.

Churches: Anglican, Baptist, Roman Catholic, United, Lutheran, Pentecostal, Jehovah's Witnesses.

Fraternal Organizations: Masons, Elks, Royal Purple.

Service Clubs: Kiwanis, Optimist, Kinsmen, Canadian Legion, Chamber of Commerce.

Societies: Home and School, Women's Auxiliary Canadian Legion.

Education: A complete elementary, junior and senior high school system is operated providing instruction in all grades to the Grade 12 level. Optional subjects include typing, home economics, shop, art, music and drama. There are approximately 850 students and 35 teachers.

Theatres: Roxy Theatre, Hinton Theatre.

Cultural Activities: Brass band; pipe band; plans are being made to construct a library.

Youth Activities: Scouts, Cubs, Junior Forest Wardens, Guides, Brownies and church organizations.

Sports Facilities: Open-air skating and hockey rink, covered four-sheet artificial ice curling rink, baseball diamond, sports ground, school playground, swimming pool.

Fairs: Hinton Timberland Festival.

Population: Town population (August 1959) 3,019. Trading area population approximately 5,000.

Trading Area: North, 70 miles; west, 20 miles; south 40 miles, and east 20 miles.

Industrial Development: The North Western Pulp and Paper Ltd. invested \$60 million on a mill, woodland operations, utilities, road construction, fire equipment, etc. At the present time more than 560 persons are employed at the mill with an additional 600 persons dependent on the plant through woodland operations. The value of pulp shipped averages \$25 million per year. Annual payroll is in excess of \$2½ million.

Sites: Industrial sites with trackage and highway facilities, and residential sites can be purchased from the town or from private owners.

For further information about Hinton
write

**SECRETARY MANAGER
TOWN OF HINTON
HINTON, ALBERTA**

or

R. MARTLAND

Director of Industrial Development
Department of Industry and Development
Administration Building
Edmonton, Alberta.